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# Business Models of Internet Companies and Types of Goods Offered

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## Abstract

The article presents the relations between the business models of internet companies operating in the B2C market and the types of goods they offer (i.e. private, club, common, and public goods). The analysis shows that internet companies provide all four types of goods distinguished in the theory of economics.

## Introduction

The purpose of this article is to relate the typology of the business models of internet companies operating in the B2C market to the types of goods they offer, as distinguished in the theory of economics.

By "internet companies" (pure players) the author understands companies whose only (or at least predominant) environment for developing relations with customers is the internet. The remaining companies can be divided into multichannel (brick-and-click) companies, i.e. those which provide value to their customers using a combination of traditional and interactive channels, and brick-and-mortar companies, which operate largely outside of the internet.

The typology of business models of internet companies operating in the B2C market used in this article includes (Doligalski, 2018): online vendors (internet stores and sellers using e-commerce platforms), e-service providers (companies which offer an automated service provided through the internet), content providers (companies which publish content on the internet), multisided platforms (internet intermediaries), and community providers (companies which allow for

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interactions between people who share common interests). For the purpose of this discussion, the following typology of goods will be used: public goods, common goods, club goods, and private goods.

An analysis of these business models provides a comprehensive overview of the way companies function. The typological approach used in this article additionally reveals differences in the functioning of organizations – in this particular case, internet companies operating in the consumer market. The business models distinguished above are ideal (pure) types which do not fully reflect the complexity or diversity of real-world companies. Nonetheless, as simplified analogues, they embody their most crucial properties. Knowing the ideal types within the range of business models and the types of products these business offer enables us to understand the basic logic according to which real world companies operate, even if their business models and products are hybrids of ideal models.

## Typology of Business Models of Companies in The B2c Market

**Online vendors** are companies that deal in the sales of tangible products through an online store or an e-commerce platform. Online vendors can be middlemen who offer products that are manufactured by other companies, or, less commonly, they may sell products which they manufacture themselves. These vendors typically provide physical products, traditional services (e.g. travel packages) or digital products (e.g. software). Online vendors that offer material goods or traditional services sell private goods that are characterised by rival consumption and a feasible exclusion. Rival consumption is understood as the situation in which the consumption of a good by one person diminishes its utility to others. Paid digital products are an instance of club goods, the consumption of which is non-rival, but still remain not available to anyone.

By an **e-service** we understand a service which is provided remotely over the internet, based on the server of the provider, without any direct involvement of any employee of the provider. An e-service is thus an internet tool, often of an infrastructural nature, which requires self-management from the customer and offers individualized values. Examples of e-services include e-mail, internet search engines, internet banking systems, and network storage. E-Services are characterised by non-rival consumption (consumption of the good by one person does not limit its utility to others) and scalability, understood as the capability to serve a greater number of customers. However, such consumption may become rival when congestion problems occur, limiting the convenience of these internet services.

**Content providers** are entities that distribute content online. The scope of content provided by this type of business varies widely and includes text, graphics, audio, and video. This type of activity is characterised by the high cost of content creation and the ease of its publication in different forms and through various channels. This explains the relationships that often exists between internet content providers and enterprises in the media industry. Similarly to e-services, content is usually consumed through non-rival consumption, as long as there are no limitations to scalability.

**Multi-sided platforms** are intermediaries between different groups of customers, and provide an environment in which transactions or other types of interactions take place. They can enable financial transactions (e.g. auction platforms, travel platforms) or at least aggregate two groups of users, facilitating interactions between them (e.g. classified ad platforms, dating services). The product offered by these platforms is interaction with users from the complementary group; it is typically rival in nature and usually leads to a customer obtaining a private good. If–less commonly – a platform brings together consumers and sellers of digital goods, then it usually makes it possible to obtain a club type of good. The character of this interaction is thus dependent to a large degree on the type of good being offered.

**Community providers** are companies that offer people of similar needs, interests or identities the opportunity to enter into different kinds of interactions, such as the exchange or sharing of resources, communication, and, in some cases, cooperation. Communities are therefore based on interactions, ones that do not directly involve transactions, but instead utilise value co-creation that is oriented towards others in the community, that is the contribution of a certain user-made work or sharing a

resource to benefit the community as a whole (Doligalski, 2015). Community providers thus offer non-rival interactions with other users, interactions that lead to the creation and provision of a certain good (e.g. discussions, open source software).

Often in case of multisided platforms and community providers it is difficult to unequivocally assign companies to either of the models, as they usually combine the characteristics of each, i.e. rivalry over scarce goods (e.g. private goods, position within a ranking) and cooperation between users (e.g. sharing opinions about sellers).

## The Relationship Between Business Models and Types of Products Offered

As mentioned above, online vendors offer private goods (tangible goods or traditional services) or club goods (digital products). E-Service and content providers charge fees to their customers while offering club goods. If they are offered free of charge, should they be distinguished as public goods, or at least as commons?

Public goods are characterised by two values: the impossibility of excluding anyone from consuming the good, and non-rival consumption (Adams & McCormick 2006; Kaul, Grunberg & Stern 1999). On the other hand, if rival consumption occurs, we are dealing with a common good (commons). Typical examples of public goods include lighthouses and the ozone layer, while in the case of commons, it is parks and public roads.

So do free content or e-services bear the characteristics of one of these two types of goods? The question requires us to differentiate between two criteria: the purpose and technological properties of a given good. Both free content and e-services are offered according to the principle of common accessibility. Technically there are many ways in which a person could be denied access to a website. An internet site may not be displayed to users with a particular kind of terminal (desktop or mobile), a specific browser, or a particular IP address, which is associated with the location of the user (geoblocking) or their internet provider.

So does the technical capability to block access to certain content or e-service settle the question of the character of these goods? One might argue that a similar form of denying consumption may occur in the case of a public good such as a television signal, which can theoretically be blocked for users inhabiting a particular area. Public roads are often given as one example of a common good, but in this case, exclusion may take place by limiting access to particular types of vehicles.

These ambiguous criteria make it more difficult to qualify free content and e-services. But if we assume that a search engine or the content of a particular blog is, generally speaking, available to anyone and any potential exclusions are notably rare exceptions, then these goods are of a more public than club character. This approach may seem to contradict the formal definitions of public and common goods, nonetheless these goods are often classified as elements of a continuum or as non-pure public goods (Kaul, Grunberg & Stern 1999).

On the other hand, if content and e-services are offered free of charge over the course of limited-time promotions, after which the customer is required to make a payment (e.g. Netflix), these should be classified as club goods. This situation resembles a club that allows anyone to enter in the afternoon, but charges an admission fee in the evening.

There remains the matter of qualifying goods offered by multi-sided platforms and community providers. Multi-sided platforms usually offer rival interactions with users from the other group. In some cases, access to a platform is restricted by payment (e.g. the dating website eHarmony), and thus its product should be counted as a private good. Provided that access to the platform is free, then its product – rival interaction with users from the other group – bears the characteristics of a common good. This resembles a used car market – in the first case, there is an entry fee, while in the other, there is not. In both cases buyers compete for the best used cars offered by sellers. Community providers, on the other hand, offer non-rival interactions which may lead to the creation of certain goods (discussions, open source software). Some of them are open to everyone (e.g. Twitter, open chat forums) and hence are of a public good character. There are communities with restricted access (e.g. chat groups for classmates), and these offer a club good.

| | Feasible exclusion | Non-feasible exclusion |
|---|---|---|
| Rival consumption | **Private goods**<br>• Online vendors selling tangible products or traditional services<br>• Multi-sided platforms with restricted access | **Common goods**<br>• Multi-sided platforms with free access |
| Non-rival consumption | **Club goods**<br>• Online vendors selling digital products<br>• Paid e-service providers<br>• Paid content providers<br>• Providers of communities with restricted access | **Public goods**<br>• Free e-service providers<br>• Free content providers<br>• Providers of communities with free access |

**Table 1: Proximal relations between business models of internet companies and the types of goods offered**

While this discussion is concerned with ideal types, in practice these entities usually combine the properties of both types. Table 1. presents an attempt to associate business models of internet companies in the B2C market with the basic types of goods they offer.

## Discussion

This article presents an attempt to relate business models to the types of products offered. It combines internet companies, i.e. entities that have operated for more or less the past 20 years, with an older economic concept, namely, the typology of goods. The analysis shows that internet companies provide all four types of goods distinguished in the theory of economics.

The proposed classification is of a proximal character, as the goods offered by internet companies may not always be qualified unequivocally. Examples of goods that are difficult to categorize include e-services offered using the freemium model. A basic free version of an e-service bears the characteristics of a public good, while the paid premium version is a club good.

The classification of goods based on the criteria of rivalry and feasible exclusion does not account for revenues obtained through other channels. Thus internet content that is offered for free but allows for a display of intrusive advertisements bears the characteristics of a public good. Similarly, websites that offer free e-services, while at the same time selling – or enabling other entities to sell – their customers' data, are classified as public goods. The definition proposed by Kaul (2001) is a contemporary attempt to approach the problem of the public good by proposing that it is inclusive (public in consumption), based on participatory decision-making and design (public in provision), and that it is just (public in benefits). Under this definition, many companies that provide their content or services free of charge would not be included in the category of public goods, though these would include both Wikipedia and open source software.

The above remarks, as well as the complexity and the hybrid character of products offered by internet companies, indicate the need to formulate a new categorization of goods, one that would better reflect the conditions of the modern economy. Such a categorization could include external effects that accompany consumption, both positive (e.g. interactions between users) and negative (e.g. congestion problems).

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